

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

**Distance-Rate-Time Word Problems**

**Situation:** Maggie and her friend, Zoe, are 380 miles apart. At noon, Maggie starts to drive toward Zoe at 40 mph. Zoe leaves to meet Maggie two hours later. She is taking the same route and driving at 60 mph. At what time will Maggie and Zoe meet?

**1. What type of DRT Problem is this?**

**2. Write the GENERAL equation for this type of problem.**

**3. Define a variable.**

**4. Fill in the DRT Table below.**

	rate	time	Distance

**5. Using the GENERAL equation from #2 and your table, write an equation for the situation.**

**6. Solve the equation.**

**ANSWER THE QUESTION(S):** \_\_\_\_\_

**Situation:** Catherine leaves her house driving at an average rate of 40 mph. Her friend, Amaya, leaves a half hour later and follows her at an average rate of 60 mph. How long will it take Amaya to catch up with Catherine?

**1. What type of DRT Problem is this?**

**2. Write the GENERAL equation for this type of problem.**

**3. Define a variable.**

**4. Fill in the DRT Table below.**

	rate	time	Distance

**5. Using the GENERAL equation from #2 and your table, write an equation for the situation.**

**6. Solve the equation.**

**ANSWER THE QUESTION(S):** \_\_\_\_\_

**Situation:** Alex and his friend, Charlie, leave Alex's house traveling in opposite directions on a straight road. Charlie drives 20 mph faster than Alex. After four hours, they are 250 miles apart. How fast does Charlie drive? How fast does Alex drive?

1. What type of DRT Problem is this?

2. Write the GENERAL equation for this type of problem.

3. Define a variable.

4. Fill in the DRT Table below.

	rate	time	Distance

5. Using the GENERAL equation from #2 and your table, write an equation for the situation.

6. Solve the equation.

ANSWER THE QUESTION(S): \_\_\_\_\_

**Situation:** Alicia leaves on a 9 am (Eastern Time) flight from DC to Colorado. The plane flies an average speed of 600 mph. On her way home, the plane flies an average speed of 550 mph and Alicia's flight time is 3 hours. After her first flight, what time did she land in Colorado (in Eastern Time)?

**1. What type of DRT Problem is this?**

**2. Write the GENERAL equation for this type of problem.**

**3. Define a variable.**

**4. Fill in the DRT Table below.**

	rate	time	Distance

**5. Using the GENERAL equation from #2 and your table, write an equation for the situation.**

**6. Solve the equation.**

**ANSWER THE QUESTION(S):** \_\_\_\_\_